Fall 1997

Heart MEMO

50 Years of Progress in Heart, Lung, and Blood Research: NHLBI Celebrates Its Golden Anniversary

Fifty years ago, a heart attack meant certain death for a third of all victims. Survivors were typically hospitalized for 6 weeks, treated with painkillers, and then told to go home and stay in bed for 6 months. But thanks to a half-century of biomedical research, the average hospital stay for a heart attack now is down to 10 days, with a return to normal activities within weeks. And the average rate of death from heart attack has dropped by more than half.

Since 1948 the National Heart, Lung, and Blood Institute (NHLBI) has been at the forefront of the fight to prevent and treat heart disease. Research conducted and supported by the NHLBI has led to numerous advances in treating and preventing heart disease. These include the identification of coronary risk factors, the treatment of hypertension and hypercholesterolemia, open-heart surgery, balloon angioplasty, diagnostic tests for monitoring the heart, devices to improve heart function, and clot-busting drugs to protect the heart muscle.

But although 50 years of NHLBI's efforts have helped to dramatically reduce deaths from heart disease, it remains the number one killer of Americans, causing more than 700,000 deaths in the U.S. each year. Public awareness of the benefits of a healthy diet, exercise, and weight control has grown significantly—but convincing the public to adopt heart-healthy habits remains a challenge.

Today, an estimated 58 million Americans have some form of cardiovascular disease (CVD). Hypertension is the leading cardiovascular disease, affecting 50 million people. Coronary heart disease affects 13.9 million Americans and is the Nation's number one killer; stroke is ranked number three.

When Congress established the National Heart Institute (NHI) in 1948, the Institute's charge was to conduct and coordinate CVD research and make grants available for research projects. The next year the NHI took control of the landmark Framingham Heart Study, which led to the identification of coronary risk factors related to cardiovascular disease.

In the early 1950s, changes were taking place in the treatment of heart disease and high blood pressure. The first drugs to treat hypertension were introduced about that time, with thiazide diuretics following in 1958. Research funded by the NHI in 1957 had shown the effectiveness of treating hypertension with chlorothiazide.

The NHI also was supporting research into biomedical devices, including artificial

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Featured Articles

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DON'T MISS THE HEART HEALTH EVENT OF THE YEAR! CARDIOVASCULAR HEALTH: COMING TOGETHER FOR THE 21ST CENTURY, A NATIONAL CONFERENCE WILL MEET FEBRUARY 19-21, 1998 IN SAN FRANCISCO. ELECTONIC CONFERENCING AND VIDEOCONFERENCING OPTIONS ARE AVAILABLE. READ ALL ABOUT IT IN MARK YOUR CALENDAR ON PAGE 18.

Letter From The Director

DEAR HEARTMEMO READERS:

This year, as we mark the 50th birthday of the National Heart, Lung, and Blood Institute, we have much to celebrate. The Nation's investment in heart science has paid off in ways that could not have been imagined. In the past 30 years the national age-adjusted death rate from coronary heart disease has gone down by more than half. In 1948 a heart attack meant the end of an active life; today most patients return to normal activity within weeks. As the NHLBI's director for 15 years, I am proud to say that the Institute has been in the forefront of the fight to prevent and treat heart disease.

Yet we still have many challenges. Improvements in heart health over the past 30 years have not reached all Americans. We know that damage caused by high blood cholesterol and high blood pressure can start very early, even in childhood. We know that controlling these and a number of other risk factors lowers the rate of heart disease. The challenge now is to reach every person in every community with this critical prevention message—to raise awareness among the public and health professionals of what can be done to prevent heart disease. Putting today's proven prevention strategies into wider practice will save many lives and give more Americans a better quality of life.

An equally important challenge is to keep heart science on track toward better treatments. This issue is critical because as more people survive heart attacks, more are living with some degree of permanent heart damage. Treating them will require new strategies. Cutting-edge technology coming from biomedical research may soon allow us to:

- grow new blood vessels for a "natural bypass" around blocked arteries
- transplant healthy cells to repair damage to heart tissue and blood vessels
- create smaller, more durable heart assist devices and a workable total artificial heart
- correct some inherited heart disease risks by replacing faulty genes with normal ones.

As we mark 50 years of advances in heart research and move into the next century, we can look forward to another half-century of scientific achievement and continued progress toward eradicating heart disease.■

Claude Lenfant, M.D.
Director, NHLBI

JNC VI Is Here: Updated Guidelines Released By The National High Blood Pressure Education Program

New guidelines for preventing and treating high blood pressure have been released by NHLBI's National High Blood Pressure Education Program (NHBPEP).

The NHBPEP released the *Sixth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure* (*JNC VI*) on November 6, 1997, at a press conference before the NHBPEP Coordinating Committee meeting in Washington, DC. The report was published in the November 24, 1997, issue of *Archives of Internal Medicine* (157:2413-2446).

The guidelines provide updated treatment strategies including a system for stratifying patients into risk groups and a list of compelling indications for certain antihypertensive medications. They also reveal a disturbing trend in the treatment and control of high blood pressure and in the rates of associated diseases such as stroke and coronary heart disease (CHD).

"Despite tremendous progress in the past 25 years in awareness, treatment, and control of hypertension, these dramatic improvements have slowed," said NHLBI Director Dr. Claude Lenfant. "New data show a slight rise in the rate of stroke, increases in both end-stage renal disease and heart failure, and a leveling in the death rate for people with coronary heart disease."

"These statistics signal the need for a renewed effort by physicians and patients to prevent and treat hypertension," he said. "The guidelines can serve as a tool in meeting this major public health goal." About 50 million American adults have hypertension, he added.

Dr. Sheldon Sheps, chair of the Joint National Committee, described several critical goals identified in *JNC VI*. "We need to prevent the rise in blood pressure with age, improve control, and recognize the importance of high-normal blood pressure in the development of hypertension," said Dr. Sheps, who is also Emeritus Professor of Medicine at the Mayo Clinic.

More than 100 people contributed to the guidelines as writers or reviewers, including experts from the fields of medicine, nursing, nutrition, pharmacy, and public health. Submissions from multidisciplinary writing teams were condensed, assembled, reviewed, and edited by an executive committee comprising the *JNC VI* chair, chairs of the individual section writing teams, and chairs of previous JNC reports. The final version was reviewed and approved by the NHBPEP Coordinating Committee.

Evidence used to recommend treatments was classified according to its source—for example, randomized controlled trials, followup studies, or meta-analyses. Randomized controlled trials were used if available; otherwise, recommendations were made using the best available evidence or consensus.

HIGHLIGHTS

General Issues

- *JNC VI* presents the most recent data on hypertension awareness, treatment, and control from phase 2 of the third National Health and Nutrition Examination Survey. Updated data on the prevalence of heart failure and the incidence of end-stage renal disease are discussed in the context of their increasing burden on the health care system.
- An updated section on measurement and clinical evaluation of hypertension discusses the use of ambulatory blood pressure monitoring and patient self-monitoring as useful tools for clinicians.
- In the classification of blood pressure levels, stage 3 and stage 4 hypertension are now combined into one category, stage 3, defined as a blood pressure of 180/110 mm Hg or higher.

Treatment

- Goal blood pressure for most patients is systolic blood pressure below 140 mm Hg and diastolic blood pressure below 90 mm Hg. Lower goals are recommended for people with diabetes (135/85) or renal insufficiency (125/75) and for

some other special populations and situations.

- *JNC VI* advises stratifying hypertension patients by blood pressure stage (1, 2, or 3) and into risk groups (A, B, or C) to guide treatment decisions (see box). This means that patients are categorized not only on blood pressure level but also on the presence of other risk factors such as dyslipidemia, organ damage, smoking, and diabetes.
- The report recommends diuretics and beta-blockers as the first line of treatment for uncomplicated hypertension. Other drugs, sometimes combined with diuretics or beta-blockers, are available to treat patients with complications. In general *JNC VI* advises that most patients should be started on a low dose of the initial drug, that long-acting formulas are usually preferable, and that even if a diuretic is not chosen as the first drug it can be used to enhance the effects of other medications.
- The guidelines also describe "compelling indications" for specific drugs when patients have certain clinical conditions. For example, in older people with isolated systolic hypertension, diuretics are preferred. Patients with diabetes, kidney damage, and high blood pressure should begin treatment with angiotensin-converting enzyme (ACE) inhibitors. Heart attack is a compelling indication for using beta-blockers.
- Strategies that clinicians can use to improve the low rate of adherence to therapy are updated and amplified. The cost of drug therapy can interfere with hypertension control, according to *JNC VI*. Cost-cutting measures include using combination tablets and generic drugs and dividing some types of large tablets, which may be less expensive.

Risk Stratification and Treatment*

Blood Pressure Stages (mm Hg)	Risk Group A (No Risk Factors No TOD/CCD)†	Risk Group B (At Least 1 Risk Factor, Not Including Diabetes; No TOD/CCD)	Risk Group C (TOD/CCD and/or Diabetes, With or Without Other Risk Factors)
High-normal (130-139/85-89)	Lifestyle modification	Lifestyle modification	Drug therapy§
Stage 1 (140-159/90-99)	Lifestyle modification (up to 12 months)	Lifestyle modification‡ (up to 6 months)	Drug therapy
Stages 2 and 3 ($\geq$160/$\geq$100)	Drug therapy	Drug therapy	Drug therapy

For example, a patient with diabetes and a blood pressure of 142/94 mm Hg plus left ventricular hypertrophy should be classified as having stage 1 hypertension with target organ disease (left ventricular hypertrophy) and with another major risk factor (diabetes). This patient would be categorized as Stage 1, Risk Group C, and recommended for immediate initiation of pharmacologic treatment.

* Lifestyle modification should be adjunctive therapy for all patients recommended for pharmacologic therapy.

† TOD/CCD indicates target organ disease/clinical cardiovascular disease.

‡ For patients with multiple risk factors, clinicians should consider drugs as initial therapy plus lifestyle modifications.

§ For those with heart failure, renal insufficiency, or diabetes.

- The guidelines repeat earlier warnings from the NHLBI about adverse heart effects of a calcium channel blocker called short-acting nifedipine. This drug should be used only with great caution, if at all.
- A section on treating special populations and situations provides recommendations for these groups.

Prevention and Control

According to *JNC VI*, these are the most effective lifestyle changes for preventing and controlling high blood pressure:

- Lose weight if overweight.
- Increase aerobic physical activity to 30 to 45 minutes on most days of the week.
- Maintain a healthy diet; the DASH (Dietary Approaches to Stop Hypertension) diet is specifically recommended (see "Ditto" in *HeartMemo* Summer 1997).
- Reduce daily sodium intake to no more than 100 millimoles per day (2.4 grams sodium or 6 grams sodium chloride), which is about 1 tsp. of salt.
- Limit alcohol intake to no more than 1 ounce of ethanol per day for men (for example, 24 ounces of beer, 10 ounces of wine, or 2 ounces of 100-proof whiskey) or $^1/_2$ ounce ethanol per day for women and lighter weight people.
- Eat enough foods with potassium, such as bananas, orange juice, potatoes, yogurt, and prunes. Daily potassium intake should be at least 90 millimoles or 3.5 grams.

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The National Cholesterol Education Program

NCEP Sets Its Course For The Next Five Years

"The National Cholesterol Education Program is looking ahead to ensure that recent reductions in the Nation's blood cholesterol levels will be maintained and improved as we move into the next century," says NCEP Coordinator Dr. James I. Cleeman. The NCEP's Coordinating Committee took decisive steps in that direction through a planning process that spanned its last two meetings in December 1996 and September 1997. At those meetings the Committee identified seven major focus areas for the next 5 years (see box). Each area will be addressed through a variety of activities.

"By identifying its major focus areas and suggesting activities to advance each of them, the NCEP has positioned itself to take a more proactive stance on cholesterol-related issues in coming years," said Dr. Cleeman. For example, at its September 1997 meeting the Committee decided to address the fourth area by devoting part of its next meeting, on June 16, 1998, to managed care issues.

In other actions the Committee:

- Determined two ways to improve its own operations—a vital step for achieving program goals. First, the group will enhance communication among members by increasing its use of information technology. Second, the Committee identified a more structured process for getting members' input into future meeting agendas.
- Voted to implement a member pledge. Each representative on the Committee will submit a written pledge saying what he or she will do to advance cholesterol education in the next year and which activities they will encourage their organizations to carry out.

New Materials Enhance NCEP Efforts

Patients with coronary heart disease (CHD) and the professionals who treat them are high priority targets for NCEP messages, for several reasons:

- Patients with CHD are at high risk for a heart attack and death from CHD.
- Clinical trials have proved that lowering levels of low density lipoprotein (LDL) cholesterol in CHD patients dramatically reduces their risk.
- Less than half of CHD patients who could benefit from cholesterol lowering are being treated.

To address these issues, the NCEP has developed two new publications:

- For patients: *Live Healthier, Live Longer: Cholesterol Lowering for the Person With Heart Disease* (#3805, $3.00). This handbook explains the benefits of lowering cholesterol, emphasizes the importance of lowering LDL-cholesterol to 100 mg/dL or less in CHD patients, and walks the reader through the four steps that can lower cholesterol levels: a diet low in saturated fat and cholesterol, increased physical activity, weight control, and medication if prescribed.
- For professionals: *Cholesterol Lowering in the Patient With Coronary Heart Disease: Physician Monograph* (#3794, $3.00). This monograph reviews the scientific evidence, summarizes the basic Adult Treatment Panel II guidelines, provides guidance on implementing diet and drug therapy (emphasizing that the goal of treatment is an LDL of 100 mg/Dl or less), and offers practical advice on ways to improve adherence.

In Fall 1997 both publications were mailed to 200,000 physicians through a collaboration between the NCEP, which developed the booklets, and the University of Texas Southwestern Medical Center at Dallas, which distributed them and

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Looking Ahead: NCEP Focus Areas For The Next Five Years

1. Public health message integration and dissemination
2. Cholesterol lowering in patients with existing coronary heart disease
3. Primary prevention
4. Health care delivery and reimbursement issues (e.g., managed care)
5. Using newer technologies for communication and information dissemination
6. Education for health care professionals
7. Compliance with recommended cholesterol-lowering treatment

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For patients who have not been able to prevent or control high blood pressure after a concerted effort to change lifestyle, drug therapy should be started.

Wake-Up Call

JNC VI documents that since 1972, age-adjusted death rates from coronary heart disease (CHD) and stroke have declined 53 percent and nearly 60 percent, respectively. However, since *JNC V* in 1992, death rates for stroke have risen slightly and death rates for CHD have leveled.

Citing results from a Minnesota study showing a decrease in awareness, treatment, and control of hypertension, Dr. Sheps observed, "In the past, local and regional data have been a predictor of trends at the national level. If the Minnesota data foreshadow the future, clinicians must start paying more attention to hypertension detection and treatment." As another example of local data causing concern, Dr. Sheps reported that a cohort in Iowa, which has been serially evaluated and age-adjusted, has experienced an increase in average blood pressure. These trends should be a cause of great concern among health care professionals, he said.

JNC VI also includes data suggesting that progress in other areas is not as encouraging as expected. The alarming increase in the incidence of end-stage renal disease and hospitalizations for heart failure points to the need for better control of high blood pressure in patients at risk for these conditions.

To get a copy of the *JNC VI* report (#4080) contact the NHLBI Information Center, P.O. Box 30105, Bethesda, MD 20824-0105; telephone (301) 251-1222; fax (301) 251-1223, or use this Internet address: http://www.nhlbi.nih.gov/nhlbi/cardio/hbp/prof/jncintro.htm. ■

The National Heart Attack Alert Program

New Report Targets Patients At High Risk For Heart Attack

Early treatment with thrombolytic drugs dramatically reduces death from heart attack. If thrombolysis is started within 1 hour of the onset of a heart attack, damage to the heart muscle can be prevented or minimized. Yet only 3 to 11 percent of heart attack patients are treated within the first hour after symptoms begin, mainly because they don't seek care promptly. The typical heart attack patient waits 2 to 6 hours before seeking care.

To lay the groundwork for a full-scale public education effort, the National Heart Attack Alert Program (NHAAP) Coordinating Committee convened a multidisciplinary Working Group on Strategies To Prevent Prehospital Delay in Patients at High Risk for Acute Myocardial Infarction. The working group was asked to describe a very high-risk patient population, predictors of patient delay, and recommendations for educating these patients about early recognition of heart attack symptoms and appropriate steps to take.

The risk for heart attack and death in patients with established coronary heart disease is five to seven times higher than for the general population.

On April 15, 1997, the working group published a summary of its recommendations in *Annals of Internal Medicine* [1997(126):645-651]. A reprint of that article, "The Physician's Role in Minimizing Prehospital Delay in Patients at High Risk for Acute Myocardial Infarction: Recommendations from the National Heart Attack Alert Program" (#55-823, $1.50), can be ordered from the NHLBI Information Center.

In June 1997 the working group published its full report, *Educational Strategies To Prevent Prehospital Delay in Patients at High Risk for Acute Myocardial Infarction* (#3787, $3.00). The report and a Microsoft PowerPoint slide show based on it can be downloaded at no charge from the NHLBI Internet site at http://www.nhlbi.nih.gov/nhlbi/cardio/heart/prof/hattkhc.htm.

Here are highlights of the working group's report:

Why target high-risk patients?

Some 8 million Americans have coronary heart disease (CHD), about 3 million have cerebrovascular disease, and about 2 million have peripheral vascular disease. Patients with established CHD or clinical atherosclerotic disease of the aorta, arteries to the limbs, or carotid arteries are at high risk for heart attack or CHD-related death. About 50 percent of all heart attacks and at least 70 percent of

CHD deaths occur in people who already have cardiovascular disease. The risk for heart attack and death in patients with established CHD (or other atherosclerotic disease) is five to seven times higher than for the general population. Thus, heart attack education should be targeted at patients with a clinical history of:

- Myocardial infarction
- Angina
- Coronary artery bypass surgery
- Angioplasty
- Carotid atherosclerosis
- Peripheral vascular disease.

What are the predictors of patient delay?

Researchers have found that people who are older and female tend to wait longer to seek help for a heart attack. Delays also seem to be associated with race (e.g., African Americans) and low socioeconomic status, although this finding is not consistent.

Researchers also have considered

Patients should be encouraged to quickly activate the emergency medical services system by calling 911 or other emergency numbers.

the role of physicians and other health care providers, family members, significant others, and friends in helping patients decide to go to an emergency room. Most patients consult someone, either a layperson or a physician, before calling 911 or taking other transportation to the hospital. If patients call a doctor, delay times are significantly increased because physicians and other health care providers may not be available at the time of the call. Office staff or telephone services may try to reach the doctor or give advice and assurance, increasing the delay. If patients consult a friend, coworker, or even a stranger, they come to the emergency room faster than if they consult a family member or significant other.

What messages should high-risk patients receive?

Educational messages to high-risk patients should cover three essential points: basic information, emotional issues, and social factors.

Patients should be given information about the typical and atypical symptoms of heart attack and what to do if they have those symptoms. It should be stressed that symptoms may come on gradually and may be vague or intermittent. If a patient has had a previous heart attack, it should be explained that the symptoms of the next heart attack may be different. Instructions should be given about medications such as nitroglycerine and aspirin. Patients should be encouraged to quickly activate the emergency medical services system by calling 911 or other emergency numbers.

Patient education messages should address emotional issues surrounding a heart attack. A patient's natural inclination is to delay and to attribute heart attack symptoms to a noncardiac cause. To counter this, the rewards of acting quickly and getting definitive treatment must be emphasized. Positive messages about surviving and saving heart muscle when treatment begins fast may be more effective than negative messages about delay and the possibility of sudden death.

Patient education should acknowledge the social factors involved in deciding to seek treatment. Most patients consult a family member or significant other about their symptoms. Family members and significant others should be included in all education and counseling. They should have a good knowledge of heart attack symptoms and understand the importance of calling emergency medical services quickly.

What educational techniques should be used?

Rehearsal is one strategy to deal with the denial that patients experience as part of their emotional response. Because symptoms can increase anxiety, patients should be encouraged to rehearse their response to a possible heart attack at less stressful times, so that the reaction becomes automatic. Just as people practice fire or disaster drills at work or rehearse what to do in

Positive messages about surviving and saving heart muscle with prompt treatment may be more effective than negative messages about the delay and the possibility of sudden death.

case of a home fire, reviewing feelings and optimal behaviors in response to heart attack symptoms may increase the likelihood that appropriate steps will be taken despite an intense emotional reaction.

Finally, office staff members in health care settings (particularly receptionists and others who are likely to talk to the patient first) should understand and support this patient education effort. Practitioners should provide clear instructions and training to their staff about what to do when a patient with cardiac symptoms calls or walks into the office seeking advice. Precious time must not be wasted while the staff member tries to reach a physician who is temporarily unavailable. The physician (or policymaking committee in a managed care setting) should devise a triage system in the office or clinic to quickly identify and treat such patients.

The NHLBI Obesity Education Initiative

Prescription Diet Pills and Heart Valve Disease: DHHS Issues Interim Public Health Recommendations

Since 1995 the use of prescription weight loss drugs has increased dramatically. However, recent reports of valvular heart disease in women taking the prescription diet pills fenfluramine and dexfenfluramine led the Food and Drug Administration (FDA) to ask for their voluntary withdrawal from the market in September 1997. Many patients who have taken these medications and their physicians have asked for guidance on the need for medical evaluation and treatment. In response the Department of Health and Human Services (DHHS) has just issued interim public health recommendations on cardiac valvulopathy associated with fenfluramine and dexfenfluramine.

The recommendations appeared in the November 14, 1997, issue of *Morbidity and Mortality Weekly Report.* They were developed jointly by the Centers for Disease Control and Prevention, the FDA, and the National Institutes of Health (the NHLBI and the National Institute of Diabetes and Digestive and Kidney Diseases) in consultation with the American Heart Association, American College of Cardiology, and American Dental Association.

Fenfluramine and dexfenfluramine appear to aid appetite suppression and thereby weight loss by affecting metabolism of the neurotransmitter serotonin in the brain. Besides their use as single-drug therapy, fenfluramine and sometimes dexfenfluramine have been combined with another appetite suppressant, phentermine, as "fen-phen" therapy. Since 1995 about 14 million prescriptions have been written for fenfluramine or dexfenfluramine, and an estimated 1.2 to 4.6 million Americans have used at least one of them.

In July 1997 Mayo Clinic researchers reported 24 cases of valvular heart disease in women who had gotten fen-phen treatment; by September 1997 the FDA had received reports of 144 such cases. Also in September 1997 the FDA received five echocardiographic prevalence surveys of patients across the country who had taken dexfenfluramine or fenfluramine alone or combined with phentermine; 30 to 38 percent had valvular disease. Preliminary data suggest that patients exposed to the drugs for 6 months or more are at higher risk for developing the disease. Based on this information the FDA asked for a voluntary withdrawal of the two drugs from the U.S. market; the withdrawal was announced by the manufacturers and the FDA on September 15.

DHHS has issued the following interim recommendations:

- Anyone who has used dexfenfluramine or fenfluramine, for any length of time, either alone or combined with other agents, should undergo a medical history and cardiovascular examination to determine the presence or absence of cardiopulmonary signs or symptoms.
- An echocardiographic evaluation should be done on all people exposed to the two drugs for any length of time, alone or combined with other agents, who show cardiopulmonary signs (such as a new heart murmur) or symptoms (such as dyspnea—difficult or labored breathing) that suggest valvular disease.
- Health care providers should strongly consider performing echocardiography on exposed patients before they undergo invasive procedures for which the 1997 American Heart Association guidelines recommend antimicrobial prophylaxis. These include certain medical and dental procedures, such as teeth cleaning, that can cause significant bleeding. Such procedures can expose patients to bacteria that could lead to heart valve infection if the per-

Watch for new clinical guidelines on treating obesity from the NHLBI's Obesity Education Initiative. The guidelines will be presented at the National Conference on Cardiovascular Health in San Francisco, February 19-21, 1998 (see page 18). They were developed by the Expert Panel on the Identification, Evaluation, and Treatment of Obesity in Adults—the first NHLBI expert panel to use an evidence-based approach to formulate treatment guidelines. We'll give you all the details in a future *HeartMemo*.

son already has valve disease. If the echocardiogram shows valve disease, the patient can take antibiotics before undergoing the procedure to reduce the risk of bacterial infections of the heart.

Because enough data should become available in the next year to make recommendations on continued echocardiographic monitoring, DHHS does not, for now, recommend routine followup echocardiograms to determine progression, regression, or stabilization of valve disease. Physicians should use their best judgment based on the patient's history and current heart health to determine the need for followup heart exams.

The safety and efficacy of appetite suppressant drugs and other drugs to help weight loss are being addressed in clinical guidelines now being prepared by the Expert Panel on the Identification, Evaluation, and Treatment of Obesity in Adults. At present no drugs are approved for long-term use to treat obesity.

Health care practitioners should continue to inform the FDA of patients with heart valve disease who have used fenfluramine, dexfenfluramine, or phentermine. To report cases, call the FDA at 301-827-3172 or check the FDA's web site at http://www.fda.gov/cder.■

The Cardiovascular Health Promotion Project

Update On CHPP/NRPA Partnership Activities

In the last *HeartMemo* we reported on the alliance between NHLBI's Cardiovascular Health Promotion Project (CHPP) and the National Recreation and Park Association (NRPA) to promote physical activity and cardiovascular health in children. Here's what's happened since then:

- Some 30,000 elementary school teachers have received *JumpStart* materials for use in third, fourth, and fifth grade classrooms. Each teacher also got 32 colorful "Home Connection" sheets promoting family physical activity to send home to parents. *JumpStart* materials also went to 500 local park and recreation agencies in the teachers' communities for use in after-school, summer, and ongoing youth programs. Designed for after-school and summer school activities, *JumpStart* is an innovative teaching packet filled with ideas for getting kids moving and helping them form lifelong habits for good health. *JumpStart* materials can be downloaded from the NHLBI web site: http://www.nhlbi.nih.gov/nhlbi/cardio/other/prof/jumpstrt.htm.
- A TV public service ad featuring Jonathan Taylor Thomas, star of TV's "Home Improvement," was mailed to 400 stations around the country, and NRPA has sent out another 50 to fill requests. Next step: "We'll use parts of this PSA to create a classroom video that teachers can use to promote physical activity," Ms. Spangler says.

In the future: building local coalitions to promote physical activity among young people. "Community involvement is the key to making these programs work and keeping them going," says CHPP Coordinator Karen Donato.■

Minority Populations

For African Americans

NHLBI is reaching out to African Americans with a brand new set of seven easy-to-read health education brochures and a heart-healthy cookbook. The seven-booklet package (#55-832, $3.00) includes:

- *Embrace Your Health! Lose Weight If You Are Overweight*
- *Energize Yourself! Stay Physically Active*
- *Be Heart Smart! Eat Foods Lower in Saturated Fats and Cholesterol*
- *Spice Up Your Life! Eat Less Salt and Sodium*
- *Protect Your Heart! Prevent High Blood Pressure*
- *Empower Yourself! Learn Your Cholesterol Number*
- *Refresh Yourself! Stop Smoking*

A companion piece is *Heart-Healthy Home Cooking: African American Style* (#3792, $2.50), which tells how to prepare African American dishes with less saturated fat, cholesterol, and salt.

All of these materials are packed with heart-healthy information, user worksheets, tips, and recipes tailored to African American culture. Health care providers and professionals can use them to improve the health of African Americans by increasing awareness of cardiovascular disease and promoting heart-healthy behaviors.

Building Healthy Hearts In Native Americans

Now on the drawing board at NHLBI: a pilot project to increase knowledge of heart disease and promote heart health among Native Americans. Health promotion activities will address the cardiovascular needs of this population while incorporating their cultural values and traditions. These activities are planned:

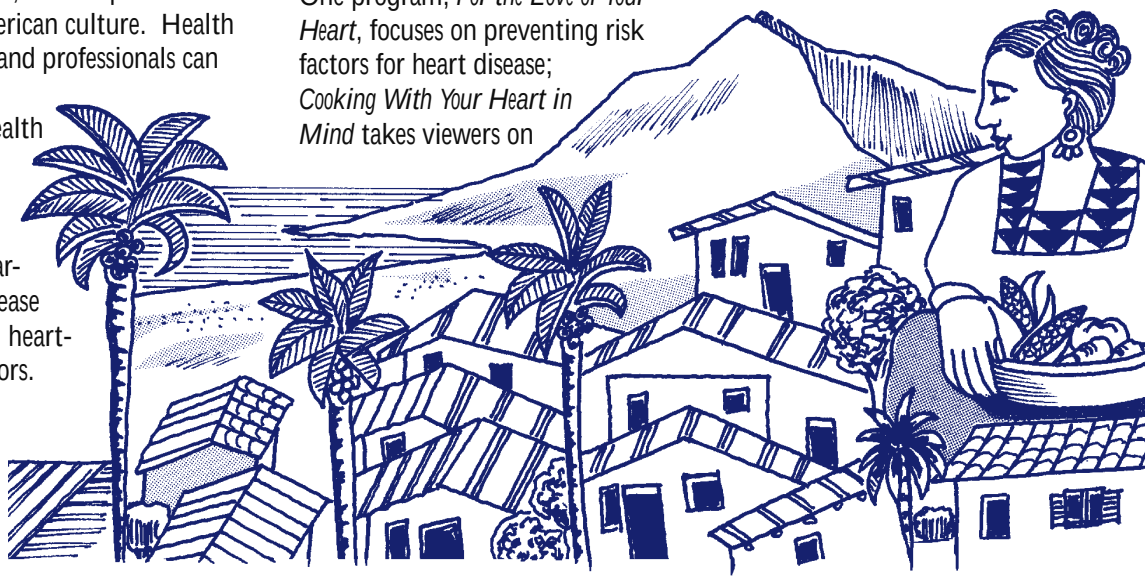
- focus groups or discussion circles to assess needs and opportunities for communicating heart health messages
- products and materials to promote community education
- establishment of alliances to stimulate adoption and implementation of the project's goals
- evaluation of the project.

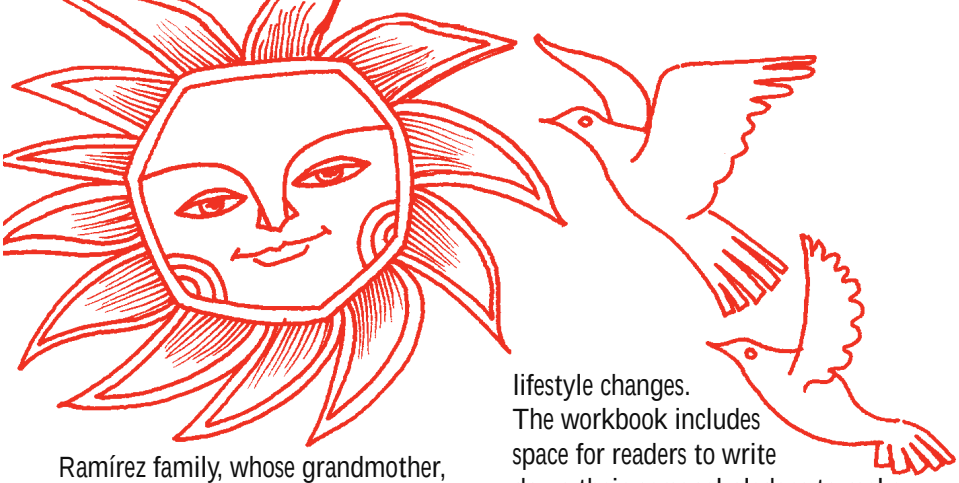
For Latinos

Charlas how-to guide. The charlas project has proved effective and popular— and now there's a new manual on how to organize charlas, which are group discussions about heart health. *From Heart to Heart: A Bilingual Group Discussion Guide (De Corazón a Corazón: Guia Bilingüe Para Organizar una Charla)* is written in English and Spanish and comes with a videotape with two educational programs in Spanish (#4050, $8.00). One program, *For the Love of Your Heart*, focuses on preventing risk factors for heart disease; *Cooking With Your Heart in Mind* takes viewers on a heart-healthy food shopping trip and shows them how to prepare heart-healthy Latino dishes.

This unique and lively package will help churches, clinics, and community-based organizations improve heart health at the grassroots level in Latino communities across the Nation.

Telenovelas. These are short TV stories in Spanish that dramatize the best ways to prevent cardiovascular disease. The vignettes spotlight the





Ramírez family, whose grandmother, Doña Fela, teaches the rest of the family how to lower the risks of heart disease. Healthy and spirited in her 70s, Doña Fela exercises regularly, doesn't smoke cigarettes, and follows a low-fat, low-sodium diet. A video with the telenovelas will be used as a teaching tool in the *Salud para su Corazón Health Promoters' Manual* now being developed.

Photonovela. Based on the telenovelas featuring the Ramírez family, the photonovela is a book with five short stories in Spanish. Each story has a workbook segment with Doña Fela's tips for making heart healthy lifestyle changes. The workbook includes space for readers to write down their personal pledges to make these changes.

Late Breaking News! The NHLBI's *Delicious Heart-Healthy Latino Recipes (¡Platillos Latinos Sabrosos y Saludables!)* and the Institute's package of eight easy-to-read heart health booklets in Spanish and English both placed first in the 1997 Blue Pencil Awards. Sponsored by the National Association of Government Communicators, this U.S. Government-wide competition recognizes the best Federal publications each year. Order the cookbook (#4049, $2.50) and the booklet set (#55-745, $3.00) from the NHLBI Information Center.■

Everything You Need To Know About Women's Heart Health

A new edition of the popular *Healthy Heart Handbook for Women* was published in July 1997. This easy-to-use, easy-to-read handbook explains factors that place women at risk of heart disease and tells how they can protect their heart health. It has special information for women with heart disease, including warning signs of a heart attack and how to prepare a heart attack survival plan. Other topics covered are hormone replacement therapy, cholesterol, healthy eating, physical activity, how to talk with your doctor, vitamin supplements, and, by popular request, heart-smart recipes.

This update incorporates feedback from women across the country who answered a reader survey. The NHLBI wanted to know their opinions and what topics they would like to see added or discussed in more detail in the new handbook.

Hundreds of women responded with detailed, thoughtful comments and ideas. Most of them liked the book's self-help emphasis. Most wanted even more information to help them decide about hormone replacement therapy, treatment for high blood cholesterol, healthy eating, and physical activity. Many found the heart-healthy recipe section especially useful and wanted even more recipes. All of these topics are treated in more detail in the new edition.

Other suggestions led to entirely new subjects for the handbook. These include warning signs of a heart attack, how to talk with your doctor about heart health, and whether vitamin supplements can prevent heart disease.

"Thanks to the detailed feedback we got from women around the Nation, this edition of the handbook will be even more useful to women as they make informed decisions about their heart health," said Terry Long, senior manager for health communications in the Institute's Office of Prevention, Education, and Control.

For your copy of the *Healthy Heart Handbook for Women* (#2720, $5.50), contact the NHLBI Information Center.■

The National Center on Sleep Disorders Research

Working Group Addresses Problem Sleepiness

When getting sleepy interferes with daily activities or makes it hard to function, it's called "problem sleepiness." The disorder can cause problems in concentrating, memory lapses, weariness, fatigue, and lethargy, according to the *Working Group Report on Problem Sleepiness.* This new document, from a working group of the NHLBI's National Center on Sleep Disorders Research, addresses problem sleepiness and its potential consequences. The working group examined research on problem sleepiness, summarized what is known about the disorder, and identified aspects that are not well defined or that need more study. Here are the highlights:

What is known about problem sleepiness?

Problem sleepiness is most evident when people unintentionally fall asleep during routine waking activities. It can be due to lifestyle factors such as insufficient or irregular sleep or to untreated sleep disorders such as sleep apnea and insomnia. Lifestyle factors are the most common cause.

The effects of problem sleepiness are only beginning to be recognized. Reports indicate that people with untreated sleep disorders have a higher incidence of automobile accidents. Moreover, drowsiness in the "sleepy" healthy person can cause disruptions in performance such as difficulty in sustaining attention, slowed responses, difficulty remembering recent information, and problems maintaining a stable level of performance. This condition can result in errors and accidents, including automobile crashes.

Although problem sleepiness can affect anyone, it is especially common among shift workers, adolescents, and young adults.

Shift work is employment outside the conventional 7 a.m. to 7 p.m. work hours. About 20 million Americans (20 to 25 percent of workers) do shift work. According to surveys, 60 to 70 percent of shift workers complain of sleep difficulties or problem sleepiness. The causes are often insufficient sleep and nighttime work, which disrupts the timing of sleep and wakefulness. The consequences of sleepiness-related mistakes both on and off the job can be serious, even catastrophic.

Problem sleepiness also affects a significant percentage of youths. Associated behaviors include trouble getting up for school, falling asleep in school, and struggling to stay awake while doing homework. The cause of most problem sleepiness in adolescents and young adults is a pattern of insufficient, irregular, and poorly timed sleep. Performance failures and lapses; mood, attention, and behavioral effects; and auto accidents can result.

What actions are needed?

The working group made these recommendations:

- Target educational messages to shift workers, adolescents, and young adults.
- For shift workers: design a multifaceted approach involving education, better scheduling, controlling exposure to light, and napping to study the effects of potential countermeasures to problem sleepiness.
- For adolescents and young adults: begin with a major educational program that reviews the causes, consequences, and prevention of problem sleepiness. The most obvious need is to increase the total amount of sleep in teens and young adults. There needs to be a consistent message for children, parents, educators, and health care professionals about the importance of adequate sleep for optimal functioning and well-being.
- Study the neurobiology, genetics, epidemiology, and neurobehavioral and functional consequences of sleepiness.
- Do more research on the prevalence and consequences of problem sleepiness and on effective countermeasures.

The working group concluded that: "Because virtually all segments of society are potentially affected by problem sleepiness, educational messages based on research about its causes and consequences are essential for improving the health, safety, and productivity of Americans."

The *Working Group Report on Problem Sleepiness* can be downloaded at no charge from the NHLBI's web page: http://www.nhlbi.nih.gov/nhlbi/nhlbi.htm.

These related materials are available from the NHLBI Information Center:

For professionals: *Problem Sleepiness in Your Patient* (#4073, $2.50)

For patients: *Facts About Problem Sleepiness* (#4071, no charge, also on the NHLBI web site)■

(continued from page 1)

heart valves and heart-lung machines to aid in open heart surgery. Better imaging techniques were developed in the 1950s and 1960s, including cardiac catheters and radionuclide angiography to view the beating heart.

The 1960s brought more advances, and toward the end of the decade a discernible improvement was seen in death rates for heart disease. Technological progress included routine use of heart valve replacement and arterial bypass surgery. Research into developing an artificial heart began in 1964. That research continues today with left ventricular assist devices, the total artificial heart, and other mechanical devices now being tested in NHLBI-supported clinical trials. The first successful heart transplant took place in 1966, with coronary artery bypass grafts following in 1967.

Coronary care units (CCUs) began popping up in the Nation's hospitals in the early 1960s. In 1967 the Institute initiated a collaborative effort with CCUs known as the Myocardial Infarction Research Units study to investigate heart attacks and improve their detection and treatment.

The National High Blood Pressure Education Program—a partnership among the Institute, professional and volunteer health agencies, and State health departments—was launched in 1972 to reduce death and disability from hypertension, dubbed the "silent killer." This program has disseminated national guidelines on treating and preventing hypertension to health professionals a half-dozen times. In November 1997 the Joint National Committee issued its sixth report on preventing, detecting, evaluating, and treating high blood pressure. Death from strokes, the most devastating outcome of high blood pressure, has gone down 58.7 percent since the program was introduced. But new data from the most recent guidelines show a need to step up public education efforts because of a slight rise in the rate of stroke, an increase in both end-stage renal disease and heart failure, and a leveling in the death rate for patients with heart disease.

Meanwhile, results from the Framingham Heart Study in the late 1960s showed a link between heart disease and elevated blood cholesterol levels, and researchers set out to prove that lowering cholesterol might lower the risk of heart disease. In 1984 NHLBI's Lipid Research Clinics Coronary Primary Prevention Trial showed that reducing cholesterol could lower the risk of heart disease and heart attacks. Another large clinical trial—the Multiple Risk Factor Intervention Trial—also supported cholesterol lowering and smoking cessation to prevent heart disease. These findings led to the creation of the National Cholesterol Education Program in 1985.

In the late 1970s advances in imaging techniques allowed researchers to use cardiac catheters to insert tiny balloons into narrowed arteries to open blockages, a procedure called angioplasty. In 1995 an NHLBI-funded study looked at whether angioplasty or coronary artery bypass grafts worked better to unblock blood vessels. The Bypass Angioplasty Revascularization Investigation found that death rates for both procedures were the same—except in diabetics, who fared better with bypass surgery.

Advances also were being made in the pharmacologic treatment of cardiovascular disease. During the late 1970s and early 1980s, physicians added calcium channel blockers and angiotensin-converting enzyme (ACE) inhibitors to their arsenal of antihypertensive drugs, which had been limited to beta-blockers and diuretics. Other studies at that time showed that thrombolytic agents could reduce the damage from heart attacks. Clot-busters such as tissue

On The Road With NHLBI's 50th Anniversary Exhibit

NHLBI's 50th birthday exhibit is touring the U.S. Here's where you can check it out in 1998:

- Cardiovascular Health: Coming Together for the 21st Century, A National Conference, San Francisco, CA, February 19-21, 1998.
- American College of Cardiology, Atlanta, GA, March 29-April 1, 1998.
- American Thoracic Society/American Lung Association, Chicago, IL, April 25-29, 1998.
- National Institutes of Health, Building 10 (Clinical Center), NIH Campus, Bethesda, MD, May 1998.
- National Medical Association, San Diego, CA, August 1-5, 1998.
- American College of Chest Physicians, Chicago, IL, October 25-29, 1998.

Clot-busting drugs such as tissue plasminogen activator (TPA) are now given routinely to certain heart attack patients—and in 1996 Federal regulators approved the use of TPA to treat stroke victims in the first 3 hours after a stroke.

plasminogen activator (TPA) are now given routinely to certain heart attack patients, and in 1996 Federal regulators approved the use of TPA to treat stroke victims in the first 3 hours after a stroke.

In the early 1980s epidemiological studies began to show that different segments of the population were at increased risk for developing heart disease. African American men, for example, were at higher risk for hypertension. This information spurred NHLBI to begin targeting specific audiences with its public education messages, an effort which has now become the Minority Outreach Program.

In 1991 the Institute began the National Heart Attack Alert Program to improve the diagnosis and treatment of myocardial infarctions. The program seeks to reduce the amount of time between onset of a heart attack and the start of treatment. The goal is to treat heart attacks within 30 minutes after the patient gets to the emergency room. In 1998 the program will evaluate the results of a large community intervention project, the Rapid Early Action for Coronary Treatment (REACT) study.

In the summer of 1991 two clinical trials showed the positive effect that drug treatment was having in the war against heart disease. The Systolic Hypertension in the Elderly Program demonstrated that low doses of diuretics to treat isolated systolic hypertension in people older than age 60 significantly reduce stroke and heart attacks. A month later the Studies of Left Ventricular Dysfunction found that death and hospitalization for congestive heart failure could be markedly reduced by treating patients with ACE inhibitors.

In the past decade, NHLBI has begun to focus more on pediatric cardiovascular disease. And several clinical trials are ongoing to examine cardiovascular disease in women, including the Women's Ischemia Syndrome Evaluation begun in 1996.

Researchers are also looking at ways to grow new tissues to help treat heart disease. Studies have shown that growth factors can stimulate new blood vessel growth around a blocked artery in a process known as angiogenesis. In the future patients may be able to grow natural bypasses rather than undergo heart surgery or even regenerate damaged heart tissue in cases of heart failure.

Researchers are just beginning to identify genes that may determine who is likely to develop hypertension or heart disease. This cutting-edge genetic research could lead to new gene therapy treatments and perhaps cures for certain heart diseases. Of course, much more needs to be understood about disease genetics and how to repair defective genes before gene therapy becomes a reality in the clinical setting.

But 50 years ago scientists could only dream of the possibility of gene therapy. The NHLBI plans to spend the next 50 years and beyond finding new ways to prevent, treat, and cure diseases of the heart, lungs, and blood. ■

50 Years Of Scientific Achievements

- Medications to control high blood pressure and high blood cholesterol
- Heart and blood vessel imaging and heart function tests
- Emergency care for heart attacks: cardiopulmonary resuscitation, defibrillation, coronary care units, clot-busting drugs
- Heart surgery: the heart-lung machine, heart transplants, coronary artery bypass, balloon angioplasty
- Discovery of genes for hypertension, heart defects, familial high blood cholesterol
- Devices: pacemakers, artificial heart valves, implanted heart assist devices

In the future patients may be able to grow new blood vessels around blocked arteries—and even regenerate damaged heart tissue in cases of heart failure.

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offered continuing medical education credit for completing a set of self-assessment questions on the monograph. They're available from the NHLBI Information Center.

Also aimed at CHD patients is a new print ad that encourages them to lower their cholesterol. Says the ad: "If you have coronary heart disease, here's something new to look forward to: LIVING LONGER." Urging CHD patients to aim for an LDL level of 100 or less, the ad advises them to talk to their doctor about the steps they can take: change their diet, be physically active, lose weight if needed, and take cholesterol-lowering medication if prescribed. Released in Fall 1997, the ad was sent to major consumer publications. ■

HIGHLIGHTS OF THE NHLBI'S PAST 50 YEARS

June 1948:
President Harry S. Truman signs into law the National Heart Act, which established the National Heart Institute.

July 1949:
The landmark Framingham Heart Study transfers from the Bureau of State Services to NHI.

July 1956:
The National Institutes of Health's Clinical Center admits its first patient for heart disease research.

December 1963:
President Lyndon B. Johnson approves a joint congressional resolution to designate February as "American Heart Month."

October 1968:
Dr. Marshall W. Nirenberg, chief of NHI's Laboratory of Biochemical Genetics, wins the Nobel Prize in Physiology or Medicine after discovering the key to deciphering the genetic code.

November 1969:
NHI expands its mission and is renamed the National Heart and Lung Institute.

May 1972:
The Institute is charged with coordinating the National Sickle Cell Disease Program.

July 1972:
NHLI launches the National High Blood Pressure Education Program. The Institute reorganizes again by dividing into seven divisions, including the Division of Heart and Vascular Diseases and the Division of Blood Diseases and Resources.

September 1972:
The National Heart, Blood Vessel, Lung and Blood Act of 1972 further expands the Institute's mission to include blood diseases and prevention and control programs.

June 1976:
NHLI is officially named the National Heart, Lung, and Blood Institute.

April 1984:
The Division of Epidemiology and Clinical Applications is established to focus on clinical trials, behavioral medicine, nutrition, and epidemiology.

November 1985:
NHLBI creates the National Cholesterol Education Program to raise awareness of the dangers of high blood cholesterol.

March 1989:
NHLBI introduces the National Asthma Education Program.

January 1991:
The institute begins an Obesity Education Initiative.

June 1991:
A National Heart Attack Alert Program is started to reduce the number of deaths from myocardial infarctions through rapid diagnosis and treatment.

June 1993:
The NIH Revitalization Act of 1993 creates the National Center on Sleep Disorders Research within NHLBI.

September 1993:
The National Cholesterol Education Program publishes its second report on detecting, evaluating, and treating high blood cholesterol.

February 1997:
The expanded National Asthma Education and Prevention Program issues updated guidelines for diagnosing and treating asthma.

November 1997:
The National High Blood Pressure Education Program releases its sixth report on the detection, evaluation, and treatment of hypertension.

HeartScience

Hypertension Treatment Prevents Heart Failure Among Elderly

Treatment with a low-dose diuretic cuts by half the chance that an older person with high systolic blood pressure will develop heart failure. For elderly people who already have had a heart attack, the treatment lowers the chance of developing heart failure by 80 percent.

"Heart failure has been increasing in the U.S. in recent years—the only cardiovascular disorder to do so. That is why the SHEP findings are so important for older Americans."

Those findings come from the Systolic Hypertension in the Elderly Program (SHEP), a long-term clinical trial funded by NHLBI and the National Institute on Aging. The study's results appeared in the July 16, 1997, issue of the *Journal of the American Medical Association.*

In isolated systolic hypertension, systolic blood pressure is high but diastolic pressure is normal. More than 3 million Americans older than age 60 have the degree of systolic hypertension treated in SHEP: a systolic of 160 to 219 mm Hg with a normal diastolic. Hypertension is the main risk factor for heart failure, which causes about 875,000 hospitalizations a year; half of heart failure patients die within 5 years of their diagnosis.

SHEP followed 4,736 men and women, age 60 and older, for an average of 4.5 years. Fatal and nonfatal cases of heart failure dropped dramatically with treatment. The greatest benefits were seen in the 492 patients who had already had a heart attack before the trial.

Earlier SHEP results showed that low-dose diuretics greatly reduce fatal and nonfatal strokes and other cardiovascular events among older people. The new findings focus on whether the treatment prevents heart failure.

"Heart failure has been increasing in the U.S. in recent years—the only cardiovascular disorder to do so—and there are now about 400,000 new cases annually," said NHLBI Director Dr. Claude Lenfant. "That is why these findings are so important to older Americans."■

Blood Transfusions Prevent Strokes In Children With Sickle Cell Anemia

Regular transfusions of red blood cells prevent strokes in children with sickle cell anemia, said an NHLBI clinical alert issued on September 18, 1997.

The alert was based on new data from NHLBI's Stroke Prevention Trial in Sickle Cell Anemia (STOP), which showed that giving blood transfusions every 3 to 4 weeks to children with the disease reduces their rate of stroke by 90 percent. Periodic transfusions of normal red blood cells kept the amount of abnormal, or sickle, red blood cells down to no more than 30 percent of total hemoglobin. The results were so compelling that the study was stopped on August 29—16 months earlier than planned.

"This is very good news for the roughly 2,500 children with sickle cell anemia who may be at risk for stroke, and for their families," said NHLBI Director Dr. Claude Lenfant. "Although this is not a cure, transfusions offer these children hope of avoiding the ravages of a stroke."

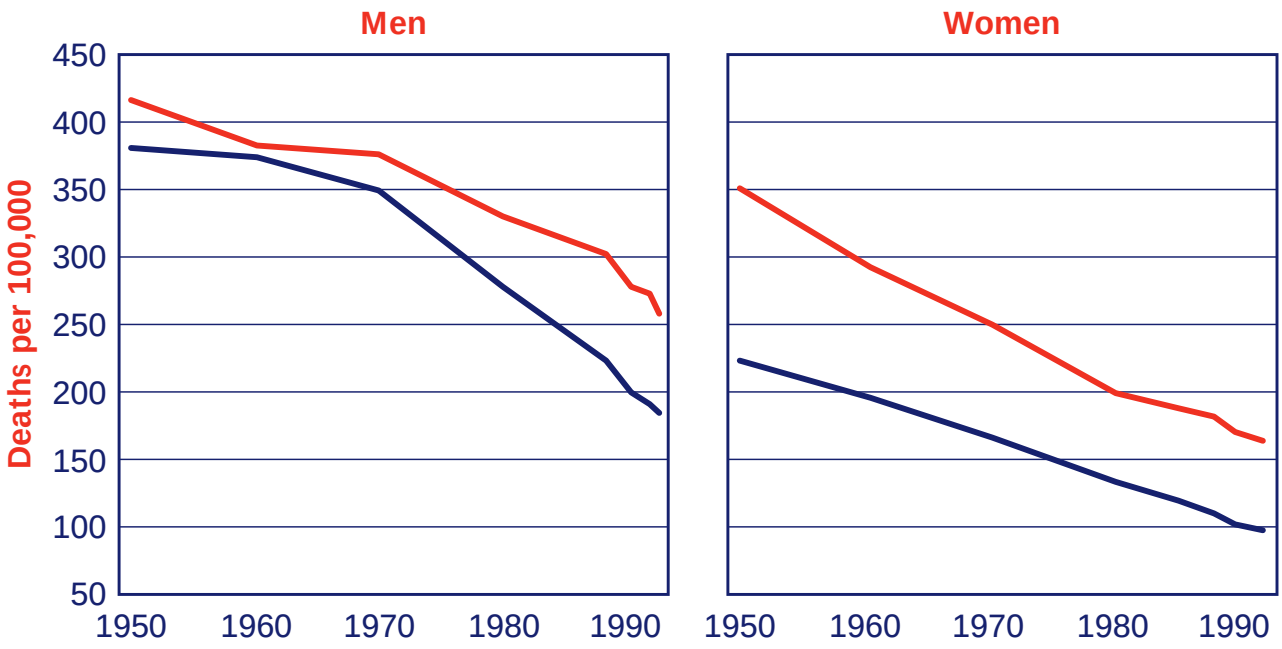
"This is very good news for the 2,500 children with sickle cell anemia who may be at risk for stroke. Blood transfusions offer them hope of avoiding the ravages of a stroke."

Sickle cell anemia is the most common genetic blood disorder in the U.S., affecting some 1 in 500 African American and 1 in 1,000 Hispanic newborns each year. About 10 percent of children with the disease have debilitating strokes that can damage their ability to move, speak, and learn. Once the child has a stroke, the risk of having another is about 80 percent.

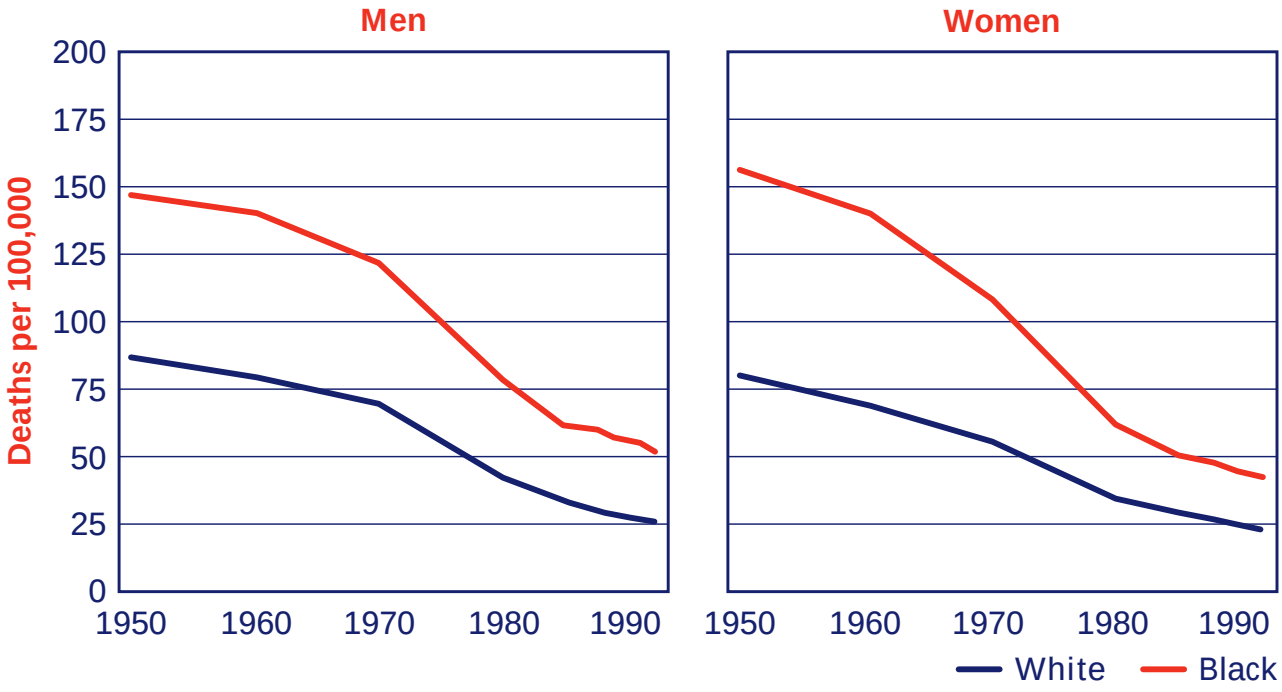
For a copy of the clinical alert, call the NLHBI Information Center at 301-251-1222 or check the NHLBI's web site: http://nhlbi.nih.gov/nhlbi/nhlbi.htm.■

HeartFacts

Age-Adjusted Death Rates for Heart Disease by Sex and Race: United States, 1950-92



Age-Adjusted Death Rates for Stroke by Sex and Race: United States, 1950-92



Mark Your Calendar

NHLBI 50th Anniversary Events

- March 29-April 1, 1998: American College of Cardiology, 47th Annual Scientific Session. Georgia World Congress Center, Atlanta, GA. Call 301-897-2694 or check the ACC's web site: http://www.acc.org.
- April 18-22, 1998: The Experimental Biology '98 Meeting. Moscone Convention Center/San Francisco Marriott, San Francisco, CA. 50th anniversary workshop, "Utilization of Resources for the Genome Project," on possible applications of human genome research to medical practice. Call 301-530-7010.
- May 26-28, 1998: "Global Shifts in Disease Burden—The Cardiovascular Disease Pandemic." 50th Anniversary Conference sponsored by the Pan American Health Organization, the NHLBI, and the Fogarty International Center (NIH). Pan American Health Organization Building, Washington, DC. Call 301-496-5375.
- August 30-September 2, 1998. "Heart Health Into the Next Millennium." Third International Heart Health Conference. 50th anniversary symposium will cover the Framingham Heart Study, NHLBI clinical trials, the National High Blood Pressure Education Program, and NHLBI national guidelines for clinical practice. Raffles City Convention Centre, Singapore. Call 65-336 3875 or e-mail: wxpsin@singnet.com.sg.

Coming In February: National Conference on Cardiovascular Health

Don't miss the heart health event of the year: "Cardiovascular Health: Coming Together for the 21st Century, A National Conference," February 19-21, 1998, at the Hyatt Regency Embarcadero Hotel in San Francisco.

This landmark meeting will examine all aspects of cardiovascular health and disease—including the latest research findings, new clinical management approaches, creative prevention strategies, health care delivery trends, and state-of-the-art communications approaches. It's also a great chance to forge partnerships, collaborations, and networks to work for better heart health for all American communities.

Sessions are organized around eight important cardiovascular health topics. Each will be discussed in a major session as well as smaller sessions, roundtables, workshops, and posters. The eight topics are:

- Delivering health—changing systems, changing roles
- New directions in preventing and treating obesity and in promoting physical activity
- Communicating cardiovascular health: people, programs, and policies
- The continuing challenge of high blood pressure control in the 21st century
- Cholesterol control: a key to preventing atherosclerosis in our time
- Coming together for heart-healthy communities
- The cardiovascular health of women: increased awareness, new knowledge
- New directions in managing multiple risks

Also on the agenda is the first presentation of new evidence-based practice guidelines for evaluating and treating obesity in adults, from an expert panel convened by the NHLBI's Obesity Education Initiative.

To get registration forms, call 415-476-5808 or go to the NHLBI's web site (www.nhlbi.nih.gov/nhlbi/nhlbi.htm) and click on "National Conference on Cardiovascular Health."

If you have an Internet address, you can register for electronic conferencing. You'll get transcripts of major conference sessions by e-mail shortly after each session, and other conference materials as well. The fee is $75 and you must register in advance.

If you have access to a satellite viewing facility, you can host a local videoconference for health professionals in your area and see the first half-day of the meeting. To arrange one, contact Keith Hewitt at hewittk@gwgate.nhlbi.nih.gov by January 31, 1998.

HeartNet

Here are the latest additions to the NHLBI web site at http://www.nhlbi.nih.gov/nhlbi/nhlbi.htm:

- Search the site: a shortcut that lets you search by subject and find what you need quickly.
- Latino cardiovascular health resources: a guide to NHLBI's health education programs and publications designed for Latino communities. As *HeartMemo* went to press, the site featured *Salud para su Corazón (For the Health of Your Heart)*—an exciting new community-based heart health promotion that targets Latinos in the U.S.—and listed NHLBI's health education materials in English and Spanish.
- NHLBI Information Center: Here's your doorway to the wealth of resources and materials available from the Info Center. From here you can access lists of NHLBI publications and download many of them at no charge.

And these other health-related web sites have come to our attention:

Healthfinder

www.healthfinder.gov: This gateway site offers links to more than 1,250 other sites to help consumers find DHHS information easily and quickly.

NIH Health Information

www.nih.gov/health: This site gives consumers a single access point to the resources of the National Institutes of Health, including publications, clearinghouses, and the Combined Health Information Database.

InteliHealth

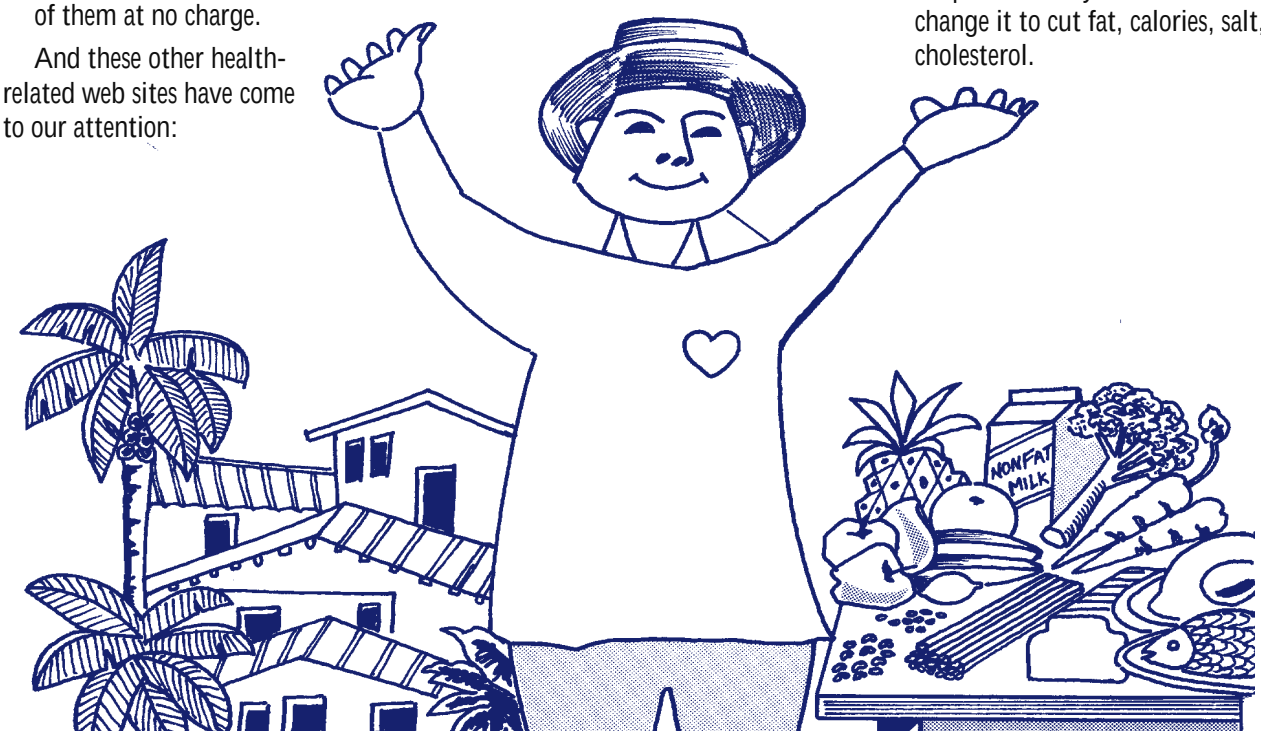
www.intellihealth.com: A joint venture of Johns Hopkins University and Aetna U.S. Healthcare, this site offers a wide-ranging collection of consumer health information from partners including NHLBI, the National Institutes of Health, the National Library of Medicine, and many more.

Sapient Health Network

http://www.shn.net: This site delivers customized health information to patients with chronic or serious illnesses. The user enters a "personal health profile" into the system and gets information about diagnosis, treatment options, alternative therapies, useful products, family and work issues, and coping strategies.

Mayo Health Oasis

http://www.mayo.ivi.com: From the Mayo Clinic comes a lively health information site with lots of user-friendly features. These include Newsstand, a weekly update on health and medical research news; "Ask the Mayo Physician," which lets you question a doctor or browse answers to other questions; interactive quizzes to test your health knowledge; and the Heart Center, full of heart health advice and resources. "The Virtual Cookbook" even lets you send in your favorite recipe and a Mayo dietitian will change it to cut fat, calories, salt, or cholesterol.



HeartSources

For Health Care Professionals

New from the NHLBI and the American Heart Association: a comprehensive training program on cardiovascular disease (CVD) risk factors for health care professionals. Two versions are available:

- a complete lecture kit with slides, scripts, and background materials (#V64-9617, $43.00)
- a participant packet with the same lecture script and patient education materials on topics such as exercise and nutrition (V64-9055, $5.50).

Clearly presented and well organized, the program focuses on information that health care providers need to identify, treat, and counsel adults with CVD risk factors. To order, call 1-800-611-6083.

For Elementary Schools

Fourth graders are the target group for *Aim For 5*, a two-lesson nutrition and exercise program that features aerobic exercise to rap music. Lesson 1 focuses on healthy eating; Lesson 2 stresses the importance of everyday physical activity. Lots of fun activities are part of the lessons—food tastings, songs, prizes, the 5-a-day rap exercise routine, and much more. *Aim For 5* was devised by the Allegany County, MD, Health Department. You can order the 5-a-day exercise cassette tape by calling 1-800-555-6115.

From Tulane University Medical Center in New Orleans comes a health education program for kindergarten through sixth grade called *Health Ahead/Heart Smart.* Developed under an NHLBI National Research and Demonstration Center grant, the program has a strong nutritional/school lunch component and a physical education part called *Superkids/Superfit.* It emphasizes developing self-esteem and healthy habits at an early age to prevent later problems such as drug and alcohol abuse, teen pregnancy, and violent behavior. Materials are described on the Internet site of Tulane's Center for Cardiovascular Health; the address is www1.omi.tulane.edu/cardiohealth. To order the program for your school, write or call: The Health Ahead/Heart Smart Program, Tulane Center for Cardiovascular Health, 1430 Tulane Avenue, New Orleans, LA 70112, 504-585-7179. ■

New at the NHLBI Information Center

It's Here! Introducing The Catalog

By now you should have received your new *National Heart, Lung, and Blood Institute Education Materials Catalog* (#3085). If you haven't, it's on the way; all *HeartMemo* subscribers are getting a copy.

A wealth of educational resources are listed in this comprehensive guide—publications, posters, videos, Internet resources, and more. Topics include cardiovascular disease and its risk factors, asthma, blood disorders, sleep disorders, obesity, physical activity, minorities and special populations, women, and youth.

NHLBI Information Center Internet Mailing List

If you have Internet access, you can get e-mail announcements about new NHLBI materials by subscribing to the NHLBI Information Center notification list (NHLBIINFO-L). You'll also get press releases and other information that may be of interest. You can join the list at any time by following these simple steps:

1. Address a message to LISTSERV@LIST.NIH.GOV
2. Don't worry about the subject field. Type in anything, or leave it blank if your e-mail software lets you do this.
3. Type the command SUBSCRIBE NHLBIINFO-L in the body of the message.
4. Send the message.
5. The LISTSERV will send you a confirmation message. Hit the reply button, type OK in the body of the reply, and send the message back to the LISTSERV. Anytime you want to leave the list, send the command SIGNOFFNHLBIINFO-L to LISTSERV@LIST.NIH.GOV.

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It's organized into two sections: materials for health professionals and materials for patients and the public. Each item includes the title, brief contents, special features (e.g., charts, forms, graphics), number of pages, order number, and price.

While single copies of some items are free, please note that there is now a nominal charge for certain materials. This money will be used to restock out-of-print materials and will allow the NHLBI to continue offering a wide range of materials.

For the first time, customers can buy materials in large quantities. For some publications prices are listed for packages of 25 and 100; for other publications discounts are available for bulk quantities. The NHLBI continues to explore other ways to help large-volume customers. For example, a limited number of materials are available on printers' disks, which lets customers save money by using local printers to produce the quantities they need.

Some publications in the catalog (designated "www") can be downloaded free of charge from the Internet. You can access the web site at this address: http://www.nhlbi.nih.gov/nhlbi/nhlbi.htm.

We hope you'll find this new resource useful and informative. Let us know what you think of it. We'd also like to hear your ideas for future materials. Write us at *HeartMemo* or call the NHLBI Information Center at 301-251-1222. [P.S. You can get extra copies of the catalog to distribute at conferences and workshops.].

National Heart, Lung, and Blood Institute
Order Form

To order materials, please complete the order form.
All orders must be prepaid.
Fax or phone your charge card order.
Fax number: 301-251-1223
Telephone number: 301-251-1222

Make checks payable to
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**Your satisfaction is important to us.
If you have any problems with your order,
call the Information Center:
301-251-1222.**

Arroz con pollo

6 porciones de pollo (piernas y pechugas), sin pellejo
2 cucharaditas de aceite vegetal
4 tazas de agua
2 tomates, picados
1/2 taza de pimiento verde, picado
1/4 taza de pimiento rojo, picado
1/4 taza de apio, cortado en cubitos
1 zanahoria mediana, rallada
1/4 taza de maíz, congelado
1/2 taza de cebolla, picada
1/4 taza de cilantro fresco, picado
2 dientes de ajo, finamente picados
1/8 cucharadita de sal
1/8 cucharadita de pimienta
2 tazas de arroz
1/2 taza de arvejas congeladas
2 onzas de aceitunas españolas
1/4 taza de pasas

1. En una cacerola grande dore el pollo en el aceite.
2. Agregue el agua, los tomates, el pimiento rojo y el verde, el apio, la zanahoria, el maíz, la cebolla, el cilantro, el ajo, la sal y la pimienta. Cubra y cocine a fuego mediano, entre 20 y 30 minutos o hasta que el pollo esté cocinado.
3. Saque el pollo de la cacerola y colóquelo en el refrigerador. Coloque en la cacerola el arroz, las arvejas y las aceitunas. Cubra la cacerola y cocine, a fuego lento, alrededor de 20 minutos hasta que el arroz esté cocinado.
4. Agregue el pollo y las pasas y cocine 8 minutos más.

Sirve: 6 porciones
Tamaño de cada porción: 1 taza de arroz y 1 porción de pollo
Cada porción provee:
Calorías: 448
Grasa total: 7 g
Grasa saturada: 2 g
Colesterol: 49 mg
Sodio: 352 mg
Calcio: 63 mg
Hierro: 4 mg

Quite el pellejo al pollo para disminuir el contenido de grasa saturada y calorías.

Chicken and Rice

6 chicken pieces (legs and breasts), skinned
2 teaspoons vegetable oil
4 cups water
2 tomatoes, chopped
1/2 cup green pepper, chopped
1/4 cup red pepper, chopped
1/4 cup celery, diced
1 medium carrot, grated
1/4 cup corn, frozen
1/2 cup onion, chopped
1/4 cup fresh cilantro, chopped
2 cloves garlic, chopped fine
1/8 teaspoon salt
1/8 teaspoon pepper
2 cups rice
1/2 cup frozen peas
2 ounces Spanish olives
1/4 cup raisins

1. In a large pot, brown chicken pieces in oil.
2. Add water, tomatoes, green and red peppers, celery, carrots, corn, onion, cilantro, garlic, salt, and pepper. Cover and cook over medium heat for 20 to 30 minutes or until chicken is done.
3. Remove chicken from the pot and place in the refrigerator. Add rice, peas, and olives to the pot. Cover pot and cook over low heat for about 20 minutes until rice is cooked.
4. Add chicken and raisins and cook for another 8 minutes.

Yield: 6 servings
Serving size: 1 cup rice and 1 piece chicken
Each serving provides:
Calories: 448
Total fat: 7 g
Saturated fat: 2 g
Cholesterol: 49 mg
Sodium: 352 mg
Calcium: 63 mg
Iron: 4 mg

Take the skin off chicken to lower saturated fat and calories.

This is one of the most popular recipes from the NHLBI's award-winning *Delicious Heart-Healthy Latino Recipes* (#4049, $2.50).

CARDIOVASCULAR DISEASE RISK FACTORS YOU CAN DO SOMETHING ABOUT

Risk Factors	Facts You Need To Know	Take These Steps To Prevent Heart Disease
High blood pressure High blood pressure is called the silent killer.	When your blood pressure is high, your heart works harder than it should to move blood to all parts of the body. If not treated, high blood pressure can lead to stroke, heart attack, eye and kidney problems, and death. Check your number: Desirable is 120/80 mm Hg. High blood pressure is 140/90 mm Hg or more (based on reading at two different visits.)	• Check your blood pressure once a year. Check it more often if you have high blood pressure. • Aim for a healthy weight. • Be active every day. • Use less salt and sodium. • Cut back on alcohol.
High blood cholesterol Cholesterol in your arteries is like rust in a pipe. When there is too much cholesterol in the blood, the arteries become clogged, which leads to heart disease.	Total cholesterol: Desirable less than 200 mg/dL Borderline-high 200-239 mg/dL High 240 mg/dL or more If you are age 20 or older, have your blood cholesterol checked every 5 years, or more often if it is high. If it is high, ask your doctor how to lower it.	• Get your blood cholesterol level checked. • Learn what your number means. • Eat fewer foods high in saturated fat and cholesterol. • Eat more fruits, vegetables, and grains. • Stay physically active. • Aim for a healthy weight.
Smoking You put your health and your family's health at risk when you smoke.	Cigarette smoking is addictive. It harms your heart and lungs and can raise your blood pressure and blood cholesterol and those of others around the smoker.	• Stop smoking now or cut back gradually. • If you can't quit the first time, keep trying. • If you don't smoke, don't start.
Overweight Overweight occurs when extra fat is stored in your body.	Excess weight increases your risk of developing high blood pressure, high blood cholesterol, and diabetes.	• Maintain a healthy weight. Try not to gain extra weight. • If you are overweight, try to lose weight slowly. Lose 1/2 to 1 pound a week.
Diabetes When the sugar in the blood is high, your body cannot use the food you eat for energy.	Diabetes is serious; you may have it and not know you have it. It can lead to heart attacks, blindness, amputations, and kidney disease. Diabetes is a very serious problem for Latinos. Nearly 10 percent of adult Latinos have diabetes (1.3 million).	• Find out if you have diabetes. Get your blood sugar level checked by your doctor.
Physical inactivity Living a sedentary lifestyle can double your chances of heart disease and take away years from your life.	Physical inactivity increases your risk of high blood pressure, high blood cholesterol, and diabetes. Children and adults should do 30 minutes or more of moderate physical activity each day.	• Stay active. You can build up to 30 minutes each day by walking, dancing, or exercising for 10 minutes each time.

HeartMemo is a National Heart, Lung, and Blood Institute (NHLBI) publication for health professionals working in disciplines and settings related to cardiovascular health. *HeartMemo* reports on the activities of the NHLBI's national education programs, projects, initiatives, and research advances and on other news of interest to the field. Readers are urged to submit information on current treatment and prevention activities as well as research findings and activities.

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HeartMemo

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This publication is produced by R.O.W. Sciences, Inc., Rockville, MD, under Contract No. NO1-HO-39208 from the National Heart, Lung, and Blood Institute.

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